Spot II.   *Dark condensation of S.S.T.B.* $R = 9^h\ 55^m\ 7^s\cdot4$.

Date.	Long. (System II.)	O−C.	Observer.
April 22	317·8	−2·0°	Denning.
May 4	307·0	−3·1	Phillips.
6	307·4	−1·0	Denning.
6	308·6	+0·2	Phillips.
11	304·9	+0·5	,,
16	295·5	−4·9	Denning.
16	300·7	+0·3	Phillips.
18	292·3	−6·4	Denning.
18	298·5	−0·2	Phillips.
28	292·1	+1·4	,,
June 4	286·2	+1·2	,,
11	279·4	+0·1	,,
16	272·9	−2·4	,,
28	259·8	−5·8	Denning.
July 5	264·9	+5·0	,,

Summary of Results.

	Current.	Approx. Lat.	No. of Spots observed.	Rotation Period.
		°		h m s
1.	N.N. Temp. Belt	+33	2	9 55 52·0
2.	*N. Trop. Zone	+15	3	9 55 26·3
3.	S. Trop. Zone	−20	3	9 55 25·6
4.	"Red Spot"	−21	1	9 55 42·1
5.	S. Temp. Belt	−30	6	9 55 19·4
6.	Southern Spots	−40	2	9 55 6·3

Observations of Planet (433) (1898 DQ) made at the Royal Observatory, Greenwich, with the 30-inch Reflector of the Thompson Equatorial.

(*Communicated by the Astronomer Royal.*)

Photographs of Planet DQ were obtained with the 30-inch reflector of the Thompson Equatorial on 1898 December 7 with exposures of 3^m, 5^m, and 7^m, and on December 9 with exposures of 10^m, 6^m, 5^m, and 4^m. The 7^m and 5^m exposures on December 7 and the 6^m and 5^m exposures on December 9 of the planet and of eight or ten reference stars have been measured in the duplex micrometer, four measures being made of each image of the planet and two of each of the star-images, by two observers.

The right ascensions and declinations of the reference stars have been derived from the Karlsruhe Observations 1883–91, the Radcliffe Catalogue, 1890, and Schjellerup's Catalogue, 1865.

* Discussed by Mr. Denning in the *Observatory* for May and September.

Rectangular coordinates were computed from these and were compared with the measures, and linear corrections of the form $ax+by+c$ and $dx+ey+f$ deduced and applied to the measured coordinates of the planet and reference stars.

The apparent positions of the planet thus obtained are :—

Date.				App. R.A.			App. Dec.	Log Δ	Corr. for Par.	
	d	h	m	s	h	m	s	° ′ ″		R.A. s	Dec.
1898 Dec. 7	6	39	44	21	58	19·75	−0 49 25·6	0·1429	÷0·12	÷5·0
9	5	24	41	22	2	15·06	−0 30 57·5	0·1464	+0·04	÷5·0

The resulting corrections to the ephemeris given by M. Fayet in *Ast. Nach.*, No. 3530, are—

	R.A. s	Dec. ″
Dec. 7	+0·22	+ 9·6
9	+0·20	+ 10·0

The following table gives the assumed places of the reference stars and the apparent corrections obtained from the measures of the photograph :—

Name.	Mag.	Assd. R.A. 1885·0.	App. Corr. Dec. 7	App. Corr. Dec 9	Assd. Dec. 1885·0.	App. Corr. Dec. 7	App. Corr. Dec. 9	Authority for place.
		h m s	s		° ′ ″	″		
Bd. −0·4296	6·0	21 55 11·95	−0·02		+0 3 11·1	−0·7		Karls. and Rad.
− 1·4233	7·8	21 55 49·73	+0·07		−1 40 51·8	+0·9		Karlsruhe.
− 1·4236	7·7	21 56 37·86	−0·01		−1 28 21·9	−0·2		Karlsruhe.
− 1·4242	6·0	21 58 52·47	− ·05	÷ ·18*	−1 27 44·4	÷0·2	−0·2	Karls. and Rad.
−0·4303	8·0	21 59 30·20	÷ ·04	÷ ·04	−0 17 48·5	÷0·7	+0·7	Karlsruhe.
−0·4304	7·8	21 59 39·18	− ·01	− ·07	+0 4 10·4	−0·2	−0·2	Karlsruhe.
− 1·4246	3·2	21 59 52·60	− ·04		−0 52 40·4	−0·6		Radcliffe.
− 1·4249	8·3	22 0 56·60		− ·07	−1 18 26·2		−0·7	Schjellerup.
−0·4307	8·	22 1 12·95	+ ·02	− ·03	+0 0 30·5	−0·3	+0·7	Radcliffe.
−0·4310	8·4	22 2 46·71		− ·21	−0 30 2·5		0·0	Schjellerup.
− 1·4255	8·7	22 3 2·55		+ ·18	−1 33 36·5		+0·4	„
−0·4314	8·9	22 3 30·51		+ ·08	+0 7 33·2		−2·0	„
−0·4317	8·9	22 5 22·09		− ·05	−0 6 53·2		÷1·0	„
1·4262	8·3	22 5 57·72		− ·04	−0 55 41·8		÷0·2	„

Approximate centre of plate.

	R.A. 1885·0.	Dec. 1885·0.
	h m s	° ′
Dec. 7	21 58 6	−0 55
9	22 2 3	−0 50

Royal Observatory, Greenwich :
1898 *December* 13.

* Image large and elongated, with coma, making estimation of true centre difficult.

Observations of Comet i 1898 (Brooks) made at the Royal Observatory, Greenwich.

(*Communicated by the Astronomer Royal.*)

The following observations were made with the Sheepshanks Equatorial, aperture 6·7 inches, by taking transits over two cross wires at right angles to each other, and each inclined 45° to the parallel of declination. Magnifying power, 55.

Greenwich Mean Solar Time.	Observer.	☾—★ R.A.	Corr. for Refraction.	Log Factor of Parallax.	☾—★ N.P.D.	Corr. for Refraction.	Log Factor of Parallax.	No. of Comps.	Apparent R.A. of Comet.	Apparent N.P.D. of Comet.	Comp. Star.
1898.		m s	s		′ ″	″			h m s	° ′ ″	
Nov. 14　5 39 52	H.F.	−0 1·25	+0·02	9·4462	−12 6·0	−0·3	0·8208	6	17 58 23·16	85 56 50·9	a
14　5 39 52	,,	−3 25·47	+0·01	9·4462	−2 37·5	−0·1	0·8208	6	17 58 23·88	85 56 46·5	b
18　6 2 3	G.B.	−1 25·30	+0·01	9·4900	−2 41·3	−0·2	0·8404	3	18 4 38·62	90 38 1·2	c

Notes.

These observations are corrected for refraction, but not for parallax. They are also corrected for the error of inclination of the wires and for the motion of the comet.

November 18.—Comet very faint.

The initials H.F., G.B., are those of Mr. Furner and Mr. Bischlager respectively.

Comparison Stars.

	Star's Name.	Assumed R.A. 1898·0.	Assumed N.P.D. 1898·0.	Authority.
		h m s	° ′ ″	
a	B.D. +3° No. 3574	17 58 21·96	86 9 1·0	Albany Astr. Gesell. Catalogue 6058; with PM −s·01 in R.A.
b	W.B. XVII. 1264	18 1 46·90	85 59 28·4	,, ,, 6088
c	Lalande, 33391	18 6 1·35	90 40 46·1	Radcliffe (1890), 4752; with PM −s·0022 +″·09